



SUBJECT & QUALIFICATION: OCR Level 1/2 Cambridge National Certificate in Sport Science

Why is the study of Sport Science important?

Elite sport has evolved hugely in the past few decades and has embraced sport science disciplines wholeheartedly. Sports Science considers every minute detail of an athlete's training programme, rest time, environment and psychology in the pursuit of excellence. The OCR Cambridge National award in Sport Science offers students the opportunity to study key areas of Sport Science, including, anatomy and physiology linked to fitness; health; injury and performance; the science of training and application of training principles and psychology in sport and sports performance. Sport is a high-profile and expanding industry and there is a growing need for qualified professionals and capable volunteers. It is also widely recognised that regular participation in sport and physical activity is beneficial both to individuals and to society as a whole. This course provides a perfect foundation for students who wish to move into this form of employment post education and will motivate students to carry on participating in physical activity long after they leave.

What skills will the study of Sport Science teach you?

The Cambridge National in Sport Science offers students the solid foundation required for further study or progression into industry. Students will develop a wide range of highly desirable and transferable skills such as:

- Communication
- Problem solving
- Team work
- Independent study
- Performing under pressure.

What will you know and understand from your study of Sport Science?

Component 1 – Reducing the risk of sports injuries and dealing with common medical conditions

Taking part in sport and physical activity puts the body under stress. Sports injuries can be caused in many ways, ranging from accidental to deliberate acts of foul play. They can also depend on various extrinsic and intrinsic factors. Knowing how to reduce the risk of injury when taking part in sport, and how to respond to injuries in a sport setting are vital skills in many roles within the sport and leisure industry. Millions of people in the UK are suffering from medical conditions that may influence their participation in sport and physical activity, but with knowledge and understanding of common medical conditions, along with the correct treatment and emergency procedures, more people can continue to participate in sporting activities in a safer environment. In this unit you will learn how to prepare participants to take part in sport and physical activity in a way which minimises the risk of injuries occurring; prepare them to be able to respond to common injuries that can occur during sport and physical activity and to recognise the symptoms of some common medical conditions.

Component 2 – Applying the principles of training: fitness and how it affects skill performance

The role of a coach is to keep their performers in peak condition by monitoring individuals' fitness and designing bespoke training programmes. Students will learn the principles of training and how different methods target different components of fitness. They will also learn how to conduct fitness tests, interpret the results and design and evaluate fitness programmes.

Component 3 – The body's response to physical activity and how technology informs this when you exercise,



your muscles, skeleton, heart, and lungs all contribute to help you perform to the best of your ability. Each of these systems work together to help you move and take part in exercise and sport. Technology can help to inform you of the changes happening in your body and guide your training and participation. In this unit you will learn to understand how both the cardio-respiratory and musculo-skeletal systems provide you with the energy and movements needed to keep you exercising and in turn how exercise helps develop both of these systems.

How can you deepen your understanding of Sport Science?

The English Institute of Sport (EIS) located in Sheffield is a perfect environment for students to see how an elite sporting facility functions as well as the opportunities it provides. Try where possible to visit and liaise with Sports Science experts. After school enrichments are regularly offered to catch up, improve or extend knowledge. Useful websites and further reading include:

- OCR past papers
- RO41 Injuries Simplified Guide
- Use of www.theeverlearner.com

How are you assessed in Sport Science?

There are 6 assessment points each year that we term Praising Stars[©]. We assess how students, at their current stage of study, are on track to reach their end of stage targets which are formulated on aspirational expectation from their KS2 starting points. We make an informed prediction from our holistic assessments based on our subject mapping of expectation across the Sports Science curriculum. The Sports Injuries unit is a timetabled exam. The question paper consists of short-answer questions, extended-response questions and some use of multiple-choice questions. The other units are centre-assessed and OCR moderated tasks.

Key Assessment Objectives

The 4 key performance objectives for Sport Science are:

PO1 Recall knowledge and show understanding of Sport Science concepts (17–21%)

PO2 Apply knowledge and understanding of Sport Science concepts (36–38%)

PO3 Analyse and evaluate knowledge, understanding and performance (25–27%)

PO4 Demonstrate and apply sporting skills and processes relevant to Sport Science (18%)



Study of Sport Science can lead to a wide range of careers:

- Exercise physiologist
- Fitness centre manager
- Personal trainer
- Secondary school teacher
- Sports administrator
- Sports coach
- Sports development officer
- Sports therapist

OCR Level 1/2 Cambridge National Certificate in Sport Science Course Overview

Term	Year 1	Year 2
Autumn 1	Applying the principles of training	Reducing the risk of injury
Autumn 2		
Spring 1		The body's response to physical activity
Spring 2		
Summer 1	Reducing the risk of injury	Summer examinations
Summer 2		